



# County of San Luis Obispo—Department of Public Works

## County Service Area 10—Cayucos

### 2011 Water Quality Report

April 2012

**TO OUR CUSTOMERS:** The County of San Luis Obispo is pleased to present this annual report describing the quality of your drinking water. We sincerely hope this report gives you the information you seek and have a right to know. *Este informe contiene información muy importante sobre su agua de beber. Tradúzcalo ó hable con alguien que lo entienda bien.*

## SOURCES OF DRINKING WATER

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

**Contaminants that may be present in source water include:**

- *Microbial contaminants*, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- *Inorganic contaminants*, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- *Pesticides and herbicides*, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- *Organic chemical contaminants*, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- *Radioactive contaminants* which can be naturally occurring or be the result of oil and gas production and mining activities.

To help ensure that tap water is safe to drink, the United States Environmental Protection Agency (USEPA) and the California Department of Public Health (CDPH) prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. CDPH regulations also establish limits for contaminants in bottled water that provide the same protection for public health.



Whale Rock Reservoir is the primary water supply for Cayucos.

## YOUR WATER SUPPLY

The primary source of water for Cayucos is water from the Whale Rock Reservoir. Whale Rock Reservoir has a total capacity of 40,660 acre-feet. The reservoir is managed by the Whale Rock Commission comprised of the City of San Luis Obispo, the California Men's Colony, and Cal Poly. No swimming or other body contact sports are allowed on the reservoir in order to minimize viral contamination from human contact. Water from the reservoir is piped downstream to the Cayucos Water Treatment Plant (WTP) where it is treated by a filtration system followed by chlorination. Prior to chlorination, a percentage of the water is passed through granular activated carbon. In addition, Cayucos has a groundwater well, the Whale Rock Well (CAWO Well).

Treated water from the Cayucos WTP is distributed to the Cayucos Area Water Organization (CAWO) which consists of three water agencies: San Luis Obispo County Service Area 10A, Paso Robles Beach Water Association (PRBWA), and Morro Rock Mutual Water Company (MRMWC). These three agencies have a combined entitlement of 190 million gallons of water per year that can be drawn from the Whale Rock Reservoir or the CAWO Well.

The watershed sanitary survey and the source water assessment for the system was updated in 2010. The survey and assessment identify potential sources of contamination and evaluate the ability of the treatment plant and well to handle the contamination.

### 2011 Water Statistics

Total Production, million gallons	124
CSA 10A Delivered	41.3
Morro Rock Mutual Water Company	34.9
Paso Robles Beach Water Association	46.8



These tables list all of the drinking water contaminants that were detected in your water in 2011, unless otherwise noted. The presence of these contaminants in water does not necessarily indicate that the water poses a health risk. The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Thus some of our data, may be more than one year old but remains representative. For questions about this data, contact John Beaton, Water Quality Manager, at (805) 781-5111 or email JBeaton@co.slo.ca.us.

REGULATED CONTAMINANTS WITH PRIMARY MCLs, MRDLs, TTs or NLs				
Contaminant	MCL	Level Found	Violation	Potential Source of Contamination
<b>FILTRATION PERFORMANCE</b>				
Turbidity (NTU)	TT = 1NTU	0.02 - 0.25 (Average 0.06)	No	Surface water runoff
	TT = 95% of samples ≤ 0.3 NTU	100%	No	

Contaminant	Where sampled	When sampled	Reporting units	MCL or [MRDL]	PHG (MCLG) or [MRDLG]	Range detected	Average detected	Potential Source of Contamination
<b>MICROBIOLOGICAL CONTAMINANTS</b>								
Total Coliform Bacteria	Delivered	2011	Present or Absent	> 1 positive sample per month	(0)	Absent	Absent	Naturally present in the environment
Heterotrophic Bacteria	Delivered	2011	CFU/mL	TT = < 500	-----	ND-410	9	Naturally present in the environment
<b>INORGANIC CONTAMINANTS</b>								
Aluminum	Treated	2011	ppm	1	0.6	-----	0.057	Residue from some surface water treatment processes.
Fluoride	Treated	2011	ppm	2.0	1	-----	0.299	Erosion of natural deposits
<b>RADIOACTIVE CONTAMINANTS</b>								
Gross Alpha Particle Activity	Delivered	2004	pCi/L	15	(0)	ND—2.59	ND	Erosion of natural deposits
<b>DISINFECTANT RESIDUALS and DISINFECTION BYPRODUCTS</b>								
Chlorine	Delivered	2011	ppm	RAA = 4.0 as Cl <sub>2</sub>	4 as Cl <sub>2</sub>	1.19—2.50	1.64	Drinking water disinfectant added for treatment.
Haloacetic Acids	Delivered	2011	ppb	LRAA = 60	-----	1.2 - 19.9	11.8	Byproduct of drinking water disinfection
Total Trihalomethanes	Delivered	2011	ppb	LRAA = 80	-----	7.1 - 47.4	38.4	Byproduct of drinking water disinfection
<b>CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD (AESTHETICS)</b>								
Aluminum	Treated	2011	ppb	200	600	-----	57	Residue from some surface water treatment processes.
Chloride	Treated	2011	ppm	500	-----	-----	28.1	Runoff/leaching from natural deposits
Color	Delivered	2011	CU	15	-----	ND—2	ND	Naturally occurring organic materials
Odor – Threshold	Delivered	2011	TON	3	-----	1.0—3.2	1.7	Naturally occurring organic materials
Specific Conductance	Treated	2011	uS/cm	1600	-----	-----	654	Runoff/leaching from natural deposits
Turbidity	Delivered	2011	NTU	5	-----	0.02 - 0.25	0.06	Soil runoff
Total Dissolved Solids	Treated	2011	ppm	1000	-----	-----	340	Runoff/leaching from natural deposits
Sulfate	Treated	2011	ppm	500	-----	-----	73.7	Runoff/leaching from natural deposits
<b>UNREGULATED CONTAMINANTS</b>								
Alkalinity as CaCO <sub>3</sub>	Treated	2011	ppm	NS	-----	-----	230	Runoff/leaching from natural deposits; seawater influence.
Calcium	Treated	2011	ppm	NS	-----	-----	43	Runoff/leaching from natural deposits.
Hardness as CaCO <sub>3</sub>	Treated	2011	ppm	NS	-----	-----	270	Generally found in ground and surface water; seawater influence.
Magnesium	Treated	2011	ppm	NS	-----	-----	39	Runoff/leaching from natural deposits; seawater influence.
pH	Treated	2011	-----	NS	-----	-----	8.16	Runoff/leaching from natural deposits; seawater influence.
Sodium	Treated	2011	ppm	NS	-----	-----	35	Runoff/leaching from natural deposits; seawater influence.





## KEY TERMS and ABBREVIATIONS

**CU** - color units

**CFU/mL**—number of colony forming units per milliliter of sample

**LRAA (Locational Running Annual Average)** – An arithmetic average is computed quarterly for each site and compliance is based on the running average of quarters.

**MCL (Maximum Contaminant Level)** – The highest level of a contaminant that is allowed in drinking water.

**MCLG (Maximum Contaminant Level Goal) and**

**MRDL (Maximum Residual Disinfectant Level)** - The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

**MRDLG (Maximum Residual Disinfectant Level Goal)** - The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLGs are set by the U.S. Environmental Protection Agency.

**ND (Not Detected)** - Contaminant is not detectable at testing limit.

**NL (Notification Level)** – The concentration of a contaminant that, if exceeded, triggers treatment or other requirement which a water system must follow.

**NS (No Standard)** - Contaminant for which there is no established MCL.

**NTU** - Nephelometric Turbidity Unit

**pCi/L** - picoCuries per liter (a measure of radioactivity)

**PHG (Public Health Goal)** – The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the United States Environmental Protection Agency and PHGs are set by the California Environmental Protection Agency.

**ppb** - parts per billion, or micrograms per liter ( $\mu\text{g/L}$ )

**ppm** - parts per million, or milligrams per liter ( $\text{mg/L}$ )

**Primary Drinking Water Standards** – MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

**RAA (Running Annual Average)** – An arithmetic average is computed quarterly for all sites and compliance is based on the running average of quarters.

**Secondary Drinking Water Standards** – MCLs for contaminants to protect the taste, odor, or appearance of the drinking water.

**TON** - Threshold Odor Number

**TT (Treatment Technique)** – A required process intended to reduce the level of a contaminant in drinking water.

**$\mu\text{S/cm}$** — microSiemens per centimeter ( $1 \text{ S} = 1 \text{ ohm}^{-1}$ )  
A measure of electrical conductance.

## DRINKING WATER AND HEALTH RISKS

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. **The presence of contaminants does not necessarily indicate that water poses a health risk.** More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water typically comes from materials and components associated with service lines and home plumbing.

The County of San Luis Obispo is responsible for providing high quality drinking water, but cannot control the variety of materials used in household plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.

## OPERATIONS

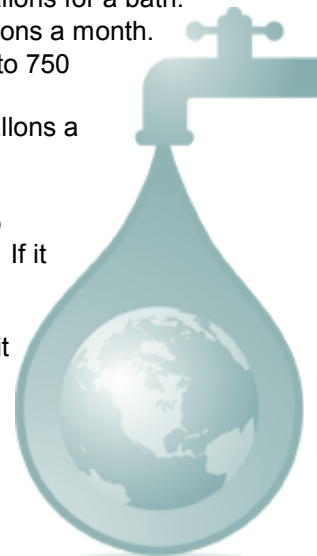
The Cayucos water system is assigned three primary operators who, like all operators who work for the County, are certified by the California Department of Public Health (CDPH). Our operators are knowledgeable professionals who have many years of experience. They are dedicated to maintaining an excellent water system and providing you with the best quality water possible.

Operators conduct weekly inspections of the well, tank, and distribution system to ensure a safe and reliable water supply. In addition, the CDPH routinely inspects the facilities, operating procedures, and water quality monitoring records to verify compliance with state and federal regulatory requirements.

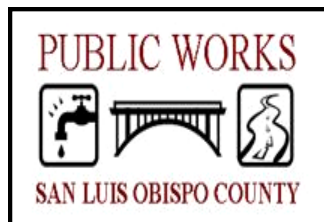
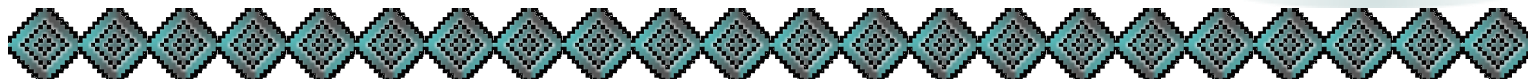
## Water Conservation Tips for Consumers

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference – try one today and soon it will become second nature.

- Take short showers – a 5 minutes shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair, or shaving, and save up to 500 gallons a month.
- Use a water-efficient showerhead. They are inexpensive, easy to install, and can save you up to 750 gallons a month.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Water plants only when necessary.
- Fix leaking toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!



Visit [www.epa.gov/watersense](http://www.epa.gov/watersense) for more information.



### Internet

USEPA Office of Ground Water and Drinking Water  
[www.epa.gov/safewater/](http://www.epa.gov/safewater/)  
California Department of Public Health  
[www.cdph.ca.gov/programs/Pages/DDWEM.aspx](http://www.cdph.ca.gov/programs/Pages/DDWEM.aspx)  
San Luis Obispo County Public Works Department  
[www.slocountywater.org](http://www.slocountywater.org)

### Telephone

John Beaton, SLO County Water Quality Manager, 805-781-5111.

### Mailing Address

County of San Luis Obispo  
Department of Public Works  
County Government Center, Room 207  
San Luis Obispo, CA 93408

**We're on the Web! [www.slocountywater.org](http://www.slocountywater.org)**

## COMMUNITY PARTICIPATION

The San Luis Obispo County Board of Supervisors meets every Tuesday (except the 5<sup>th</sup> Tuesday in a month) at 8:30am in the board chambers located in the new Government Center, 1055 Monterey Street, San Luis Obispo. The Board holds budget hearings during the month of June. Interested persons should check the Board's agendas for specific dates. Agendas for all Board of Supervisors meetings are posted in some County libraries, the County Government Center, and on the Board of Supervisors internet web site at [www.slocounty.ca.gov](http://www.slocounty.ca.gov).

The Cayucos Citizens Advisory Committee meets the first Wednesday of each month at the Cayucos Veterans Hall at 7:00 pm. The Cayucos Area Water Organization meets the first Monday of each month at the Cayucos Fire Station at 1:30 pm.

